



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/735,692	12/16/2003	Tetsushi Kawamura	246598US3	3554
22850	7590	04/27/2005	EXAMINER	
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314				ELLINGTON, ALANDRA
ART UNIT		PAPER NUMBER		
2855				

DATE MAILED: 04/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	10/735,692	KAWAMURA ET AL.
	Examiner	Art Unit
	Alandra Ellington	2855

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on amendment filed on 1/10/05.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-7 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 16 December 2003 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____. |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____. | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: _____. |

Non-Final Rejection

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baba et al (hereinafter Baba) (6,813,953) in view of Polak et al (hereinafter Polak) (5,689,089).

a. With respect to Claim 1, Baba discloses a pressure sensor with a semiconductor device capable of detecting pressure, a bonding wire 40, a terminal 10a that is connected to the semiconductor device 20 by the bonding wire 40, a housing 10,11,12,13 having an accommodation space accommodating the semiconductor device 20, the bonding wire 40 and the terminal 10a, a diaphragm 81 sealing the accommodation space and transmits pressure applied to the diaphragm 81 to the semiconductor device 20, wherein the working fluid 70 is a silicone-based oil, the terminal 10a sealed with by a sealing material 50, and the housing 12 sealed by a fluorine-based adhesive 100 (col. 3 lines 57-67, col. 4 lines 36-40, col. 5 lines 2-7,19-44 {Fig. 1}). However, Baba does not specifically teach a terminal sealed by a fluorine-based adhesive. Polak teaches a terminal 30 and housing 17 sealed by a fluorine-based adhesive 34 (col. 4 lines 16-41 {Figs. 1A,1B}). It would have been obvious to one having ordinary skill in the art

at the time the invention was made to modify Baba with the teachings of Polak to include a terminal sealed by a fluorine-based adhesive for the purpose of protecting electronic devices while operating in corrosive environments (see Polak, col. 2 lines 2-4, col. 3 lines 5-33, col. 4 lines 16-41 {Figs. 1A,1B}).

b. With respect to Claim 2, Baba discloses a pressure sensor with a semiconductor device capable of detecting pressure, a bonding wire 40, a terminal 10a that is connected to the semiconductor device 20 by the bonding wire 40, and a housing 12, having an accommodation space accommodating the semiconductor device 20, the bonding wire 40 and the terminal 10a, wherein the terminal 10a sealed with by a sealing material 50, and the housing sealed by a fluorine-based adhesive 100 (col. 3 lines 57-67, col. 4 lines 36-40, col. 5 lines 2-7,19-44 {Fig. 1}). However, Baba does not specifically teach a terminal sealed by a fluorine-based adhesive. Polak teaches a terminal 30 and housing 17 sealed by a fluorine-based adhesive 34 (col. 4 lines 16-41 {Figs. 1A,1B}). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Baba with the teachings of Polak to include a terminal sealed by a fluorine-based adhesive for the purpose of protecting electronic devices while operating in corrosive environments (see Polak, col. 2 lines 2-4, col. 3 lines 5-33, col. 4 lines 16-41 {Figs. 1A,1B}).

c. With respect to Claims 3 and 4, Baba discloses a pressure sensor with a semiconductor device capable of detecting pressure, a bonding wire 40, a terminal 10a that is connected to the semiconductor device 20 by the bonding

wire 40, a housing 12 having an accommodation space accommodating the semiconductor device 20, the bonding wire 40 and the terminal 10a, a diaphragm 81 sealing the accommodation space and transmits pressure applied to the diaphragm 81 to the semiconductor device 20, wherein the working fluid 70 is a silicone-based oil, the terminal 10a sealed with by a sealing material 50, and the housing sealed by a fluorine-based adhesive 100 (col. 3 lines 57-67, col. 4 lines 36-40, col. 5 lines 2-7,19-44 {Fig. 1}). Polak teaches a terminal 30 and housing 17 sealed by a fluorine-based adhesive 34 (col. 4 lines 16-41 {Figs. 1A,1B}). However, Baba in view of Polak does not specifically teach a perfluoro polyether resin composition. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Baba in view of Polak to include a perfluoro polyether resin composition for the purpose of protecting electronic devices while operating in corrosive environments (see Polak, col. 2 lines 2-4, col. 3 lines 5-33, col. 4 lines 16-41 {Figs. 1A,1B}). *MPEP 2144.06.*

- d. With respect to Claim 5, Polak teaches a fluid-tight pressure seal that does not include a working fluid (col. 2 lines 50-57 {Figs. 1A,1B}).
- e. With respect to Claim 6, Baba discloses a method of making a pressure sensor with a semiconductor device capable of detecting pressure, a bonding wire 40, a terminal 10a that is connected to the semiconductor device 20 by the bonding wire 40, a housing 10,11,12,13 having an accommodation space accommodating the semiconductor device 20, the bonding wire 40 and the terminal 10a, a diaphragm 81 sealing the accommodation space and transmits

pressure applied to the diaphragm 81 to the semiconductor device 20, wherein the working fluid 70 is a silicone-based oil, the terminal 10a sealed with by a sealing material 50, and the housing 12 sealed by a fluorine-based adhesive 100 (col. 3 lines 57-67, col. 4 lines 36-40, col. 5 lines 2-7,19-44 {Fig. 1}). However, Baba does not specifically teach a terminal sealed by a fluorine-based adhesive. Polak teaches a terminal 30 and housing 17 sealed by a fluorine-based adhesive 34 (col. 4 lines 16-41 {Figs. 1A,1B}).

f. With respect to Claim 7, Baba discloses a method of making a pressure sensor with a semiconductor device capable of detecting pressure, a bonding wire 40, a terminal 10a that is connected the semiconductor device 20 by the bonding wire 40, and a housing 12, having an accommodation space accommodating the semiconductor device 20, the bonding wire 40 and the terminal 10a, wherein the terminal 10a sealed with by a sealing material 50, and the housing sealed by a fluorine-based adhesive 100 (col. 3 lines 57-67, col. 4 lines 36-40, col. 5 lines 2-7,19-44 {Fig. 1}). However, Baba does not specifically teach a terminal sealed by a fluorine-based adhesive. Polak teaches a terminal 30 and housing 17 sealed by a fluorine-based adhesive 34 (col. 4 lines 16-41 {Figs. 1A,1B}).

Response to Arguments

3. Applicant's arguments with respect to claims 1-7 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Art Unit: 2855

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

(JP 2001099737 A) (4,342,231) (US 2001/0028072)

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alandra Ellington whose telephone number is (571) 272-2178. The examiner can normally be reached on Monday - Friday, 7:30am - 4:00pm.
6. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Lefkowitz can be reached on (571) 272-2180. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

7. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Alandra Ellington
Art Unit 2855

ane



MAX NOORI
PRIMARY EXAMINER